

MACDONALD JOURNAL

DECEMBER
1969

AGRICULTURE

FOOD SCIENCE

EDUCATION

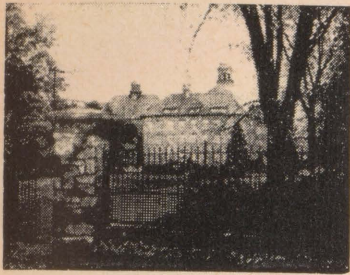


water pollution

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THE MACDONALD LASSIE



Editor

Mark W. Waldron, Ph.D.
Macdonald College

Editor, Macdonald Reports

Gordon Thomson
Office of Information

Associate Editor

Tom Pickup

Office of Information,
Quebec Dept. of Agriculture
and Colonization

Hib Saunders

Advertising Manager

Dorothy Parsons

Production-Circulation

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COVER: Stooks and stubble covered with a new blanket of snow mark the beginning of winter and a quieter, less harried pace for most farm families. It's a time of year for thinking back to the time corn was stooked like this. Photo courtesy National Film Board.



a language policy for macdonald college

One of the key issues in political, social, and educational circles in Quebec is the policy associated with the use of the French and English languages. At the same time as the issues were being debated in the National Assembly and at the same time as newspaper headlines helped Quebecers face the language policy, Macdonald College approved a statement outlining policy concerning bilingualism on the campus. The report received no headlines, little debate and didn't even arouse a demonstration by militant separatist students.

The report reviewed the attempts at bilingual education on the campuses of the University of Ottawa, Laurentian University and the Le College Militaire Royal de St-Jean. Based on these experiences, it was felt that a truly bilingual faculty would be impractical; it would naturally lean toward French in totality or English in totality.

The report indicated that it was not necessary to retain the present status with respect to French language education in agriculture at Macdonald. It was considered inconceivable for someone who wishes to obtain a degree or a diploma from Macdonald in order to play some role in Quebec, that he should have graduated from a Faculty without sufficient knowledge of the French language. This was supported by the Federal policies associated with bilingualism and biculturalism in Canada.

On these bases, the report made four recommendations:

1. Since Quebec already has a francophone Faculty of Agriculture at Laval University. English should remain the official language of teaching and administration at Macdonald College. Students have always had the option to write exams and papers in French or English.

2. College personnel associated with admissions and public relations should be bilingual.

3. Collaborative work between the Faculties of Agriculture at McGill and Laval Universities should be encouraged.

4. A Department of French Studies should be created to offer a program of courses oriented toward the professions for which the students are being trained.

These policies no doubt will be severely criticized as being too anglophone in a francophone state or equally criticized as being too supportive of the French language by an institution established "to serve the English!"

At least, it is indicative that policies can be changed as social concerns change. The recommendations are in the spirit of bilingualism for Canada and when implemented it will not be said that "l'action du Macdonald College dans la province de Québec est entravée par la barrière du langage, jusqu'à un certain point."

* * *

Lionel Sorel has retired from his position as President of the U.C.C. He was an excellent leader and will be missed. It is hoped, however, that he will be elected to the Presidency of the Canadian Federation of Agriculture. Agriculture at the National level requires the type of leadership Mr. Sorel has provided to Quebec farmers.

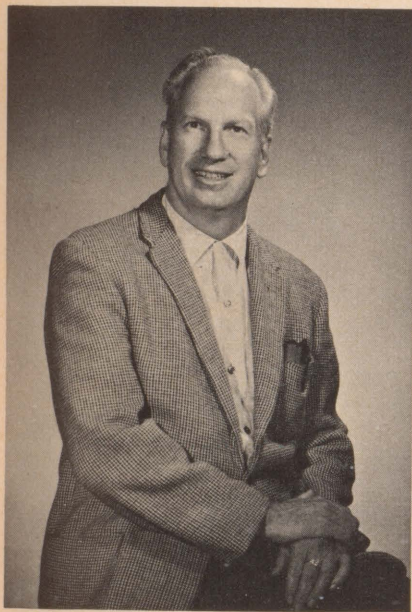
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The Faculty, students, and staff of Macdonald College join with me in wishing all our Journal readers the merriest of Christmases and a happy and prosperous New Year.

The Editor

water pollution

by
Dr. A.C. Blackwood
Department of Microbiology



Presented to a Symposium held on Tuesday, November 18 at 8:00 p.m. for a joint meeting of Sigma Psi and the McGill Biological Society.

Today it is difficult to listen to or to read the news media without being bombarded by information and opinions on the problems of water pollution. Andrew Markie of CTV introduced a presentation recently by saying, "Problem of pollution — the fouling of mankind's air, water, and soil may represent mankind's ultimate triumph over nature. Because what famine, flood, war, pestilence, and disease have failed to do, man gives every indication of accomplishing." I would like to ask a series of questions: First, is this true? Secondly, can we stop it? Thirdly, can we reach a compromise? Lastly, how long do we have?

I would like very much tonight to answer these questions but I don't have the facts or figures. So in reality, except for making a few general statements, I am able to discuss only the question of whether we are going to accomplish man's ultimate "triumph over nature."

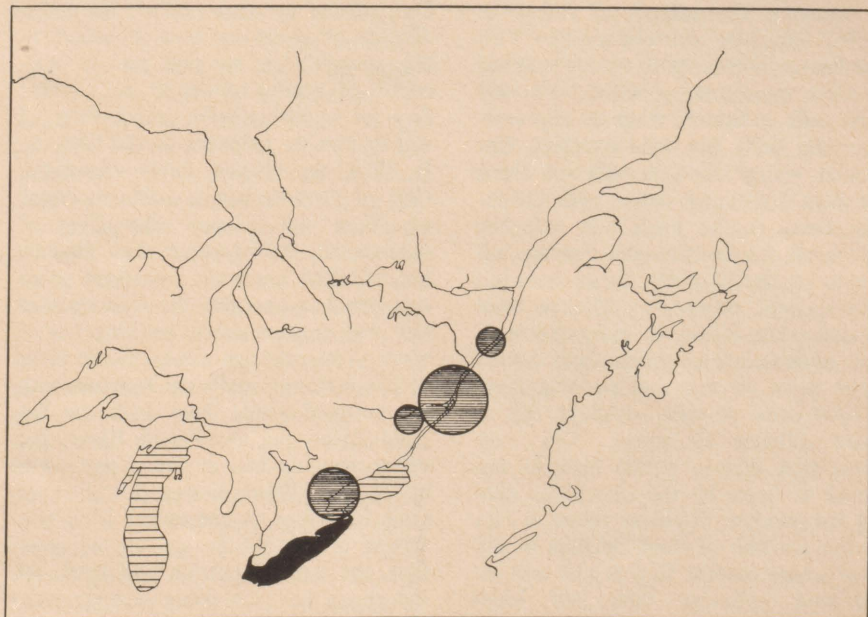
My remarks will be confined only to the problem in connection with running water and, in fact, only to large bodies of running water — the rivers that surround the island of Montreal. What do we mean by pollution? This general term covers a great many problems, but can be defined as the addition of foreign matter to an extent insupportable by nature. We must

keep in mind that pollutants vary not only as regards to quantity but also as regards to quality. We must also keep in mind that there are two general classes of pollutants. The first affects our health and is concerned mostly with the transmission of diseases. The second affects other uses of water and is related to the content of undegraded material, toxic compounds, temperature, etc.

What is the situation in Montreal?

This is our watershed which includes the largest single body of fresh water in the world. The Great Lakes form nine percent of the total fresh water in lakes in the world. Two-thirds of the people of Canada live in this watershed and, of course, a great number of people in the area to our south. You will notice that I have shaded the Great Lakes and this presents the problem as concerning pollution. Today, Lake Erie is biologically dead, Lake Michigan is in difficulties and to a lesser extent so is Lake Ontario. Fortunately for us, both the St. Lawrence and Ottawa Rivers, while highly polluted (whatever that means), are not in this catastrophic situation. What has happened? The situation is easy to understand and projections of the problem have been made many times. The amount of water in the watershed remains relatively constant. The numbers of people have increased,

Figure 1

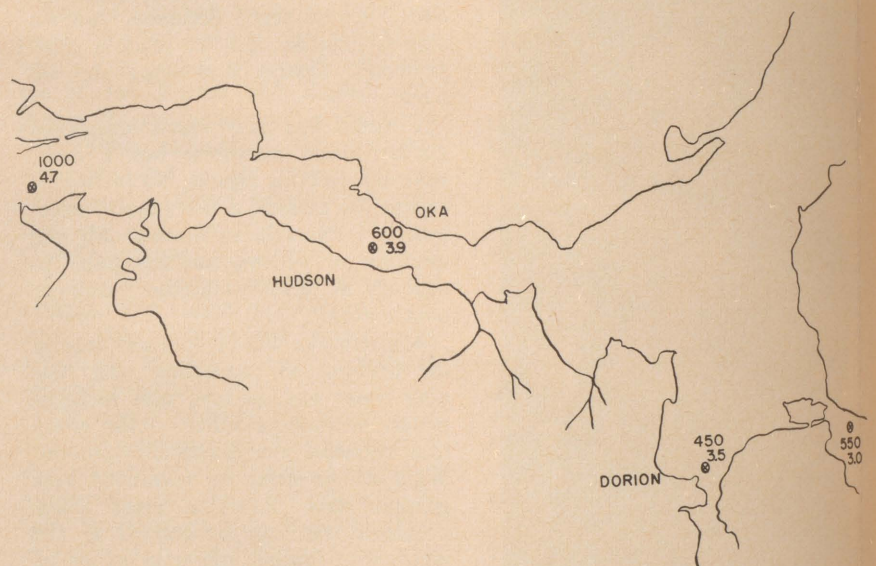


construction has increased, industry has increased. Modern agricultural processes insure that more fertilizers are added to the rivers, more pesticides are added to the rivers. Water diversion for power use interferes with the flow of the rivers. These increases are normal. The abnormal situation arises because we haven't recognized them. We have only made beginnings in Canada in our attack on this problem, and at this moment we are doing little more than talk. The reasons for this are easy to see. Public indifference, money, divided political jurisdiction.

Before the Montreal area gets the water it has already served about 12 million Canadians. It has served a great part of our Canadian industry and it has served untold numbers of our friends south of the border and their industries. There are four million more Canadians who rely on the river or its tributaries. What kind of a problem do we have? I have already said that neither of the great rivers at Montreal is biologically dead. This does not mean that they are not polluted. Let me divert for a minute or so and introduce a couple of terms. I am going to speak of coliform count and this is given in terms of the numbers of these bacteria found in a hundred ml of water, incubated on certain defined media, under certain defined conditions. The methods are standard, and the coliform count gives a very good estimate of the amount of sewage pollution in the water. Secondly, I am going to speak about B.O.D. which is a measure of the amount of total pollution in the water and gives an estimate of the amount of oxygen required by microorganisms already existing in the water to degrade the foreign material. The Health League of Canada has laid down a rule that 2,500 coliforms per 100 ml of water is the margin of safety in which people should swim. The number of coliforms in water making it unfit for drinking varies, but the main rule is that if there is any sewage then it is not wise to drink untreated water. As you will see from the data I will give later, both the rivers here, in the main, are safe for swimming but not potable. Purification plants, or should I say water filtration plants, are extremely efficient and treated water in any of our municipalities is quite safe to drink, from a bacterial point of view and possibly from a viral point of view, although this is more difficult to prove. You may know that certain public beaches are closed at times by the authorities during the summer but these relate in fact to the position of these beaches in the river where current flow is low and introduced pollution does not leave

these areas, or collects there and creates the problem. Surveys have been conducted from time to time on our rivers and at present are being conducted in a more routine manner. The results and the data are not readily available, and the data I am going to present have been gleaned from a variety of sources, some of them personal experimentation. What I have said is true in the main part of the rivers even though there are certain places, like the Back River, which has counts perhaps 10 times higher of coliforms than is safe for swimming and in the St. Lawrence below Lachine, after the addition of raw sewage from the City of Montreal where the counts are very high. You can realize this when you think that greater Montreal adds about 144 million gallons of un-

Figure 2



treated effluent per day. The mean flow of the river is about 150,000 million gallons per day and so we get a dilution of about one to a thousand. Is this enough? Let me give you an indication of what happens in the normal flow of a biologically active river. I will do this by referring to the Ottawa. In 1954, the Ottawa River above the City of Ottawa had a coliform count of about 100. Below the City of Ottawa, of 16,000 (since then Ottawa has installed a sewage treatment plant and this has changed the character of the river from a public health point of view). The coliform count in the river at Hawkesbury was very low but with the polluted water from both the Rigaud River and the North River, the count went up and at Ste. Anne's was about 500. What causes this drop in coliform count in the river? Well this relates mainly to the amount of aeration, the type of bottom and banks of the river, and the water temperature.

Rivers with many rapids and rocky bottoms recover very fast; rivers with smooth banks that are narrow and deep, protected from wind, recover very slowly. Obviously, the river can clear itself of sewage pollutant if it is not overloaded but certain additives like non-degradable detergents, phosphates, nitrates, create special problems. In this particular river, the pulp and paper industry is the major industrial pollutant. Bark from logs, cellulosic fibres from the plant along with lignin materials, chemicals, such as SO_2 , make the pollution added from pulp and paper industries a very serious problem to a river. Especially, when continued addition of these difficult compounds to degrade settle and form a smooth slime on the bottom of the river.

In a project, some of my undergraduate students looked at the river, as shown in this diagram, from Hawkesbury down to Ste. Anne's. Data from November, 1965, show that the river can recover even in this area where conditions are not ideal. The top figures are for coliform count and the bottom for B.O.D. What happens when the ice comes? The coliform count did not change very much and relative figures for February of 1966 are 900, 1,450, 600 and 350. The B.O.D. comparable values are 5.2, 5.3, 5.0, 5.8 and 5.8, and indicate that the total pollution in the river did not drop during the ice cover. Thus you must be forced to conclude from this survey that the river is able to handle its domestic sewage pollutant but is not able to handle industrial pollution when there is a lack of aeration combined with low temperatures during the winter period. We really don't know very much about the problem of

Ste. Anne de Bellevue — Ottawa River

	1954 1' depth	1965 1' depth	1968 1' depth	30' depth
Coliform	500-1,300	100-550	50-400	380-2,700
B.O.D.	1.0-1.2	3.0-5.8	0.6-8.7	0.7-10-1

ice cover and this is one field where research will be very fruitful.

Let us look at this through time, and I must apologize that these data are not very reliable. You can see, however, over this 14-year period that the condition as far as sewage pollution is concerned, is relatively constant. You will note, however, that the B.O.D. value has increased considerably. I would guess that with regard to sewage, the introduction of a sewage plant in Ottawa is about made up by the increase in population all along the river and that the load is not too much different. I included one survey showing the effect at 30-foot depth here for your interest. All this really indicates is that at Ste. Anne's, at Macdonald College, where we add raw sewage to the river, in the deepest part of the main stream, the sewage is there and doesn't come to the surface for at least some miles down stream.

With respect to Montreal, it is safe to say that in spite of the large addition of sewage and other pollutants to the river, the river can recover and data taken from Lake St. Peter show that the coliform count and the B.O.D. are not very much different from that in Lake St. Louis. The question you must ask is, "is this good or bad?"

This depends on what we want to use our rivers for? Are we content to have them as carriers of our pollutants without any attempt made to control the quality of the water in the river itself? Are we content to add raw sewage? Are we content to let our industries use the water in any manner they see fit and return used water to the river? Are we satisfied to have the people above us pollute the water so that we cannot use it for drinking, for swimming, for fishing, for our wild life? Are we content to pollute the water ourselves so that the people downstream are in the same situation? These all are moral questions. We know how to get rid of the greatest percentage of the problem. Sewage filtration plants are not perfect. They only remove a certain part of the pollution in the river. From a health point of view, after the water is treated in the sewage plant, it is safe. Each industry has a different problem, but in general industries know how to solve these problems. If we decide to

do this, what do we have to do first? Canada not only has really not started on solving the water pollution problem by building treatment plants, except in some limited areas, but it has really not, on anything like a viable scale, investigated the problems from a research point of view. Is this necessary? Can we not make use of the very extensive knowledge that has grown up as a result of the situation, on the Rhine River in West Germany, on the rivers of England and in France? The answer is yes to a considerable extent. However, we have not even trained, except for engineers, people who can talk the same language. And it is necessary not only to know the science involved but also the art of the programme. A great many universities in Canada at the moment are starting to train people in this area and funds are coming forth at an increasing rate. One of the real problems, however, is that studies on pollution are inter-disciplinary. Few of us have had the energy, the ambition or the opportunity to develop a programme of sufficient scope to include various scientific personnel that are necessary to make a viable research institute. Most of us are willing and desirous of only nibbling away at the edges of our chosen specialty. This is not only true in Canada. One of the things that impressed me a few years ago when I was at an international meeting in Munich, was that the industrial people really had the best overall approach to the water pollution problems. They knew what the total problem was and they were looking for help in explaining some of their situations. This is a very different sort of thing than is found in most other fields.

Here in Canada it is very difficult to know how much money was spent on research last year but it is of the order of three million dollars. Let me show you two or three figures that were presented to Science Council a couple of years ago to show where this research is occurring.

(Please turn page)

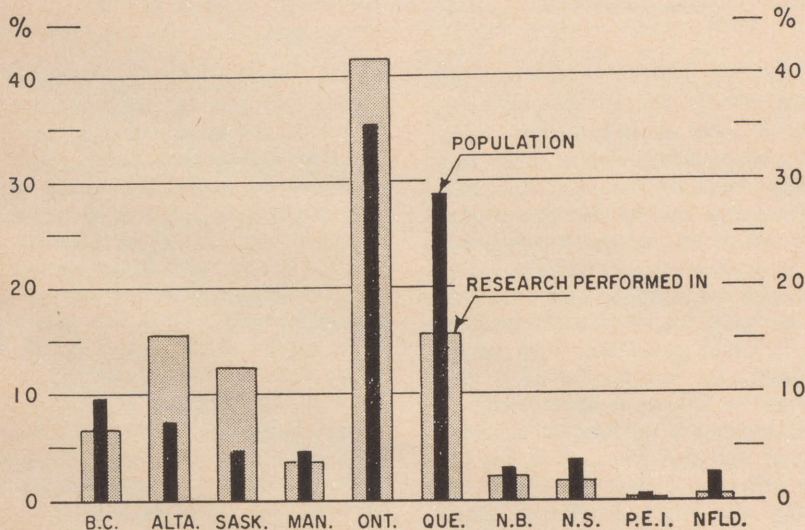
You can see that Ontario is well ahead of the other provinces, followed by Alberta with the rest of the provinces following behind.

funds have come from the Federal Government, and most of the research has been performed by the Federal Government.

If these lakes and rivers are part of boundaries between provinces, or between countries, then the Federal Government has some jurisdiction. There is another problem and that is that municipalities have the responsibility of controlling the water intake and the sewage treatment in their own municipality. They can be over-ridden and have to obey laws of the province. What does this mean to you as a taxpayer? It is projected that it will cost Quebec a billion dollars to implement water pollution measures now. The question is — can we afford it? Should we wait until there is a breakthrough in the way that we treat water, because certainly there will be progress. In fact, we cannot afford to wait for two reasons. One is that most certainly it will cost more in the future and secondly, we cannot afford to let our rivers deteriorate any more than they are now. Where do we get the money? Well, this is a political problem and I can't answer this, but I do know that we have to re-establish our priorities so that one of the greatest resources that we have will be useful to succeeding generations. It is up to you and to me to make this hard and difficult decision.

FIGURE-4

WATER RESEARCH EXPENDITURES AND POPULATION DISTRIBUTION

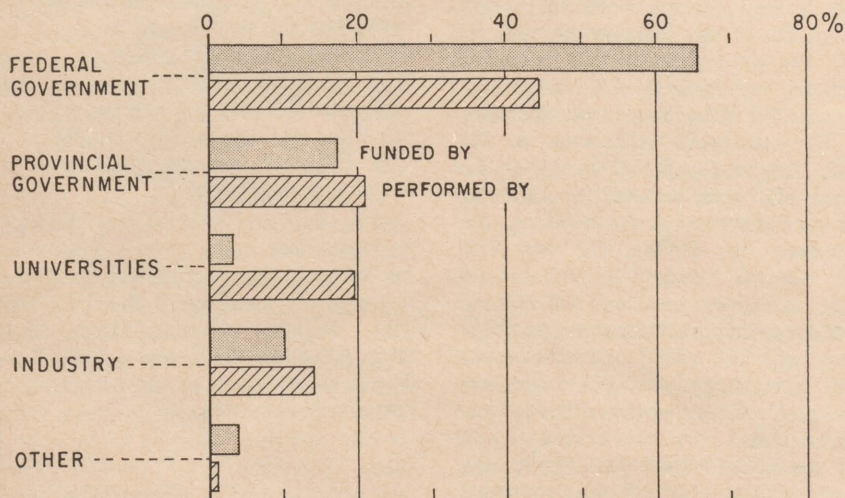


The above shows quite clearly that some of the provinces are lagging behind, particularly Quebec. Since this was reported two years ago, the Quebec Water Board that has been in existence for a very long while has again taken life and various organized committees have been appointed. It looks as if this situation will change. All of this, of course, takes time. You can see, however, that we have a particular problem here.

Let me come last then to jurisdiction. In this session of Parliament, the Federal Government is going to introduce a new Canada Water Act, designed in the words of Mr. Lang, "to break through the bureaucratic and jurisdictional maze." If this Act does this, everybody will be very much surprised, but it is certainly a step in the right direction. What is the problem? The problem essentially is that the provinces have control over the water

FIGURE-2

SOURCE OF FUNDS AND SECTOR OF PERFORMANCE



One of these problems is shown above. You can see that most of the

in lakes and rivers within the geographical boundaries of the province.

the recipe — the guide to a quality product

by
Diane A. Raymond,
School of Food Science

In hospitals, restaurants or other large institutions where meals are prepared, not for a family group, but for 200 to 1,000 at a time, the value and importance of a recipe is never overlooked. If the item is to be made to provide a specific yield, to be consistent every time it is made and to have a controlled cost, then the recipe must be accurate. If the recipe is properly worded then either an experienced employee or a novice can follow it to achieve a successful final result without difficulty.

If the recipe is sufficiently detailed and clearly presented, errors or omissions cannot occur. When you are dealing in hundreds of pounds of food stuffs you have a very costly loss if the finished product fails because one item was left out or too much was put in.

In these operations changes in recipes are not lightly made. If a new ingredient is to be tried out to see if it can be substituted for an ingredient in the recipe — or if the weight of an ingredient is to be changed, such substitutions or alterations are done by controlled experiments. The new item may be tried out in a small unit first, i.e., 5 servings, not 500. If, after three or four trials it is acceptable, then it can be tried in the regular recipe. Only one ingredient at a time is ever changed so that there is a control. If the results are not satisfactory the new ingredient must be the culprit since it is the only new factor. Perhaps the new ingredient seems satisfactory but the final product isn't as tender or light as the original then by the same rule other ingredients may be altered in weight or volume, again only one ingredient is altered at a time. This may seem a slow tedious process but unless the control is maintained there is no way to tell exactly what changes caused what result and good results can't be readily duplicated.

From time to time the form of an ingredient may be changed, eg., a dried or frozen ingredient used in place of a fresh one. This new ingredient may be drier or moister than the one it replaced, it may have a higher or lower fat content, the sweetness may be different. Any or all these factors might seriously affect the quality of the final product unless the same preliminary trials are made, using small amount recipes to evaluate the affect of the changed form of the in-

gredient and adjusting the recipe by one factor at a time. Also, recipe change could result from a shortage of an ingredient or the introduction of a new product for which claims of superiority are made. The acceptance of a substitution for an ingredient is based on the quality of the final product. If it is equal to or better than the original then the substitution is acceptable. If the result is inferior, either the original ingredient is returned to the recipe or, as in cases of short supply, the recipe is not made again until a satisfactory substitute can be found.

New recipes are the result of the same procedure of experimentation. A small home recipe may be doubled, then tripled and so on until a satisfactory yield is reached. Seldom is this a simple multiplication of all ingredients, one group may not be increased at the same rate as another — total dry ingredients may be an exact multiple of the original recipe while liquid ingredients may be less or more, depending on the product.

The homemaker will find that the recipes she uses can benefit from this quantity recipe standardization approach. The following steps will help insure consistency in your results:

1. Try out a recipe, if it is a satisfactory final product then.

2. Write it up on a recipe card that is at least 5" x 3" in size so that it is easy to read.

3. List all ingredients in the order in which they are to be used.

4. Be sure to identify ingredients carefully — is it a cup of whipping cream or 1 cup of whipped cream?

5. Follow one pattern for your recipes. In the first column list the weight or measurement — in the second column the ingredient or vice versa.

6. Quantity recipes are easier to follow if the method is put in a third column at the side. You may want to put the method at the end.

7. Don't make alterations in this recipe. If you find that certain changes can be made write up another recipe, incorporating the changes, since it is now a new item.

8. In some recipes one ingredient will substitute for another. Show this as a separate item at the end of the recipe or it might get added "as well" instead of "in place of".

9. If it is your recipe identify it as yours — you've put time and effort into developing it, why not have the credit?

Canada and World Hunger

Addressing the Twenty-third Memorial Assembly, on Armistice Day, Dr. Robert McLure told his Macdonald audience: "Probably the greatest problem for mankind is adapting to our own invention — our own development".

The outspoken Moderator of the United Church added "our greatest crisis is how to handle the shrinking world that we have created".

This year, the Memorial Assembly was presided over by McGill Chancellor Howard Ross. The Principal, Dr. Rocke Robertson, introduced Dr. McLure whose topic was "Canada and World Hunger".

The widely travelled son of a Missionary to China spent much of his early life in China and lived there until the Communist Revolution. Dr. McLure has devoted his life to bringing medical assistance to people in the developing nations. Speaking from his own experience as a medical missionary, Dr. McLure said it took a spirit of adventure to go to developing nations and teach the people of the villages to overcome their greatest need, which is to grow more food. Noting that some people held the view that "adventure was a breakdown in planning" while others felt it was "risk without a purpose", Dr. McLure commended to his audience the kind of adventure that required both the ability to make quick decisions and a deep sense of involvement.

Referring to the purpose of the Memorial Address, Dr. McLure posed the question "in memorial to whom and what?" In his view, it was in memory of those who spent their lives to make a better world. It was their task and they have handed it to us.

With 50% of the world population under 21 years of age, Dr. McLure said there is a revolution coming which has been underway for the past few years and which will reach a crisis within the next 10 years. He called this the "revolution of rising expectations". The jet, the satellite and the transistor radio have obliterated distances and caused the world to shrink. This shrinking world has made our high standard of living obvious to people in the developing nations and these people want to get some of the action for themselves! This is a hungry world where 50% of the people die without ever having had a single satisfying

meal and where 10,000 have died from starvation in the past 24 hours. Living in a nation where hunger completely changes people's thinking, makes food an obsession excluding all else, in a way that people with full stomachs can never imagine. Nothing takes the place of food and still, Dr. McLure went on, giving food is not enough. You cannot feed this starving man and walk away because his thoughts are "they are going to keep me today to let me starve at some future date!"

People in developing nations have to be taught to provide more food for themselves. Dr. McLure underlined the fact that one of the miracles of the modern world is that illiterate peasants can, in one farming season using the agricultural technology it has taken us decades to develop, increase their wheat yields from 10 to 84 bushels per acre in one four-month growing season.

Due to the fact that our society has talked so much and delivered so little in the way of help for these starving people, a tremendous credibility gap developed. Dr. McLure quoted an expression used by people in many of the developing countries: "White man's words only fool the white man".

Dr. McLure concluded by remarking that the picture of the earth rising over the moon's horizon was probably the most significant and widely circulated picture ever taken. This picture showed in the simplest terms that we on earth are in many ways on a space capsule. Like those on a space capsule, we are vitally interdependent and nations with a high degree of technical development need to get on with the business of meeting the challenge of the rising expectations of our fellow man.

A Hard Look at the Canadian Pig Industry

*Gordon C. Thomson
Information Officer.*

The Canadian Swine Council Conference on Swine Breeding and Man-

(Continued page 21)

THE FAMILY FARM

PUBLISHED IN THE INTERESTS OF THE FARMERS OF THE PROVINCE BY
THE QUEBEC DEPARTMENT OF AGRICULTURE AND COLONIZATION

Compiled by
Tom Pickup
Information Service,
Quebec Department of
Agriculture and Colonization

Photographs by
Office du Film du Québec



Shaded by splendid trees, the buildings on the Derby brothers' farm at Wright in Gatineau County stand on a slight rise 500 feet from the road. In the foreground are dual-purpose cattle.

the farm of Earl and George Derby at Wright in Gatineau County

Mr. Earl Derby and his brother George have been farming 110 acres of good loam soil near Wright in Gatineau county since 1940. The farm, about 4,500 feet long by 1,700 feet wide, extends over pleasantly rolling terrain from its frontage on the highway back to the Pekinok river. It is crossed in the middle by a railway track.

The land is farmed in a six-year rotation: two years of grain, two of hay, and two in pasture. There are 30 acres of Rodney oats which have been treated with 2,4-D and are remarkably free from weeds. During their visit on the 16th of August, the judges were puzzled by a sack lying at the edge of a grainfield: it was filled with sowthistles pulled by hand from among the oats. There are also three acres of Pride corn intended to fill a small wooden silo, and a quarter of an acre of potatoes. The hayfields and pastures are satisfactory. The 600 pounds of commercial fertilizer applied each year are used on the corn.

The cattle consists of a Hereford bull, 24 dual-purpose Shorthorn cows, 18 fattening steers, and 18 heifers. There are a dozen hogs which will be sold when they reach market weight, and about 50 Leghorn hens and the same number of pullets.

The Derby brothers have an excellent tractor and the necessary farm implements, including a potato planter, a corn binder, a pick-up baler, and a manure spreader.

The buildings stand on a slight rise, 500 feet from the highway, almost hidden from view by the magnificent trees which surround them. In the farm workshop, the judges met Mr. Blaney Derby who lives on the farm with his two brothers but usually works elsewhere.

The farm was entered for the 1959 Agricultural Merit Contest and earned a bronze medal. The fact that the judges awarded it fewer points this year simply means that their standards are higher owing to the general improvement in the farms entered for the contest.

Mr. George Derby has married since the last contest and the home has been enlivened by the presence of two charming little girls; so the household now consists of the two bachelors Earl and Blaney, Miss Inez Derby, Mr. and Mrs. George Derby, Suzanne, aged six, and Sandra, aged three.

aid to improve the health and genetic quality of swine

The Quebec Department of Agriculture and Colonization is aware of the harm being done to our herds of pigs by certain diseases and is anxious to put a stop to it. The Department is also convinced of the basic importance of the hereditary factor for increasing

the profitability of hog raising.

In order to encourage pig breeders to enroll in a provincial programme to improve the health and breeding quality of swine, the Department offers them the benefits of a twofold assistance policy with the Short Term aim of improving the health of pigs and inculcating in breeders the essential principles of preventive hygiene, and the LONG TERM aim of certifying herds and building up elite breeding stocks.

ELIGIBILITY

All pig raisers who are enrolled in official ROP and progeny-testing programmes and all breeders of hybrid pigs who wish to do so may participate in this project.

CONDITIONS AND REGULATIONS

The applicant must:

1. Submit an application to the Director of Production and Development;
2. Satisfy minimum requirements as regards buildings and equipment and the management of his herd; fulfilment of these requirements to be judged by veterinarians duly authorized by the Agricultural Offices and Laboratories division.
3. Undertake to:
 - a) keep a complete record of births, deaths, and sales of all pigs born on his farm;
 - b) mark all piglets farrowed on his farm, before they are six weeks old;
 - c) refrain from buying or acquiring any pigs from another herd without first obtaining the approval of the authorized veterinarian or else making sure that the seller's herd is also under surveillance;
 - d) allow the authorized veterinarian to make all necessary inspections, give him all the information required, and pay the expenses thus incurred;
 - e) strictly carry out the veterinarian's instructions concerning a health programme for herds;
 - f) generally, confine his herd so as to prevent all contact with pigs from another herd.

BENEFITS

The Department of Agriculture and Colonization provides the following assistance to help breeders meet the requirements of the provincial programme:

TECHNICAL AID: the facilities of its provincial and regional laboratories and reimbursement of the veterinary fees paid by the breeder for the six inspections carried out on his farm by the veterinarian during the year. The said fees are \$12 per hour, \$25 per

half-day, and \$45 per day. No automobile expenses will be paid, but the time taken by the veterinarian in driving to and from the farm will be included in the cost of his work. A receipted bill signed by the veterinarian will be accepted as proof of payment, and claims for reimbursement will be payable in June and December.

AID FOR DISEASE CONTROL: compensation for slaughter at the rate of \$25 per mature animal will be paid if, in the opinion of the director of the programme, a disease cannot be controlled otherwise.

AID FOR SELECTION: compensation to rearers of elite breeding stock for losses due to severe selection. A bonus of \$25 will be paid on each boar which meets purebred swine classification requirements but fails to pass the ROP test. Such boars will be identified by a special permanent marking.

AID FOR DIAGNOSIS AND RESEARCH: a grant at the rate of up to \$4 to abattoirs for selling and delivering to a laboratory the head and lungs of each animal requiring examination under this programme. The bill, signed by the laboratory, will be accepted as grounds for payment of the abattoir's claim, which will be payable in June and November.

This assistance policy is temporary and will remain in force until further notice.

over 330 students register at St-Hyacinthe College of Agricultural Technology

Quebec's Minister of Agriculture and Colonization, Mr. Clément Vincent, announces that over 330 students are admitted to the Institute of Agricultural Technology at St-Hyacinthe at the beginning of September.

Most students (239) enrolled for the courses in agricultural technology but about 30 registered for the dairy course and about 50 for the course in bulk milk collection; another 10 chose other options.

The forthcoming addition of new courses to the curriculum — especially ornamental horticulture — is causing a considerable increase in total enrolment at the College.

Of the 239 students in agricultural technology, 104 are first-year students, 67 are entering their second year and 68 their third year. Academic standing equivalent to high school leaving with specialization in science is required of new students in agricultural technology.

The 68 third-year students are divided among nine options: dairy, food, and laboratory technology, public health, animal science, market-garden

crops, ornamental horticulture, farm machinery, and drainage. Although specialized, the curricula in these options also stress science and general education.

The vocational course in dairying is being offered, as in previous years, to students with grade nine standing who have had at least two years experience in a dairy establishment. They will study basic subjects such as physics, chemistry, microbiology, mathematics, and mechanics. The first of the two fourteen-week sessions started in September and deals with milk constituents, processing of raw milk, and ice-cream making. The second session, which will start in January, deals with milk constituents and the making of butter, cheese, powdered milk, and concentrated milk.

loans totalling \$17.8 million by Quebec Farm Credit Bureau in 1968

In a recent report to the Minister of Agriculture and Colonization, Mr. Clément Vincent, the Quebec Farm Credit Bureau reveals that it made 1,729 loans (ordinary and settlement) averaging \$10,319 and totalling \$17.8 million during its 1968 fiscal year. Other important points are as follows:

FARM CREDIT ACT

In 1968, the Quebec government made \$20 million available to the Bureau for farm mortgage loans.

Since 1936, the Government had placed funds amounting to \$380 million at the disposal of the Bureau for loans to farmers and the Bureau had granted loans amounting to \$370.5 millions by the end of 1968. At that date, the number of current loans was 35,424 and their balance was \$166.9 million.

Of the 1,729 loans totalling \$17.8 million made by the Bureau in 1968, 1,258 were ordinary loans amounting to \$12.2 million and 471 were settlement loans for \$5.6 million. With the help of farm loans, amongst other purposes for which they used the money, farmers added 58,555 arpents to their land at a cost of \$3 million.

FARM IMPROVEMENT ACT

In 1968, the Bureau approved 10,435 applications for payment of 3% interest on behalf of 9,260 borrowers from banks and savings and credit unions. The average loan per borrower was \$2,540 and the total amount borrowed was \$23.5 million.

During the year, the amount of 3% interest rebate paid by the government

agricultural region 10

under the Farm Improvement Act was \$1,930,914, bringing the amount thus paid since 1962 to \$8.6 million. Compensation in 1968 to lenders for losses in connection with loans made under the Act amounted to \$46,344.

Of the total sum lent under the Act in 1968, 69% was used to buy farm implements and agricultural equipment or machinery; 9.4% to buy breeding stock and draft horses; 5.7 percent for automatic barn cleaners and sugaring and irrigation equipment, and 15.9% for improvements to lands and buildings.

FARM LOAN ACT

In 1968, under the Farm Loan Act, the Bureau paid borrowers from the federal Farm Credit Corporation \$1,540,322. This sum represents the difference between interest at the rate of 2 1/2% on their loans and the interest actually charged by the Corporation. Since 1962, the Bureau has thus paid \$4.8 million in interest on behalf of farmers.

integration of intermediate agricultural courses in five regional school commissions

Intermediate courses in agriculture will start immediately in five Quebec regional school commissions where this type of instruction has recently been integrated with the regular programme, in accordance with the Parent Report's recommendations on vocational education. The five school commissions are: Provencher (Nicolet County), Lanaudière (Joliette), Lapointe (Alma), Louis-Hémon (Normandin), and the Saguenay (Chicoutimi).

Pupils are now registering for the courses: it is estimated that more than a hundred have already done so.

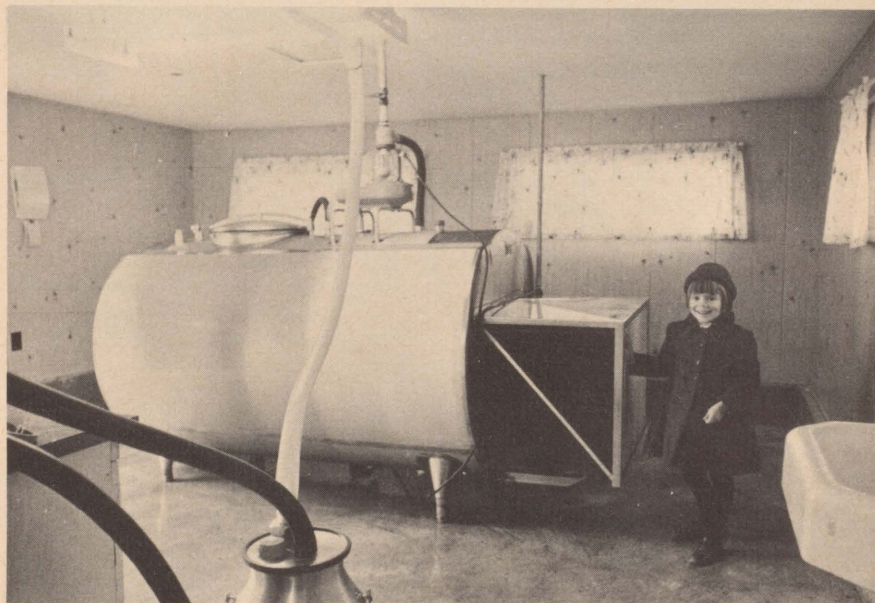
Two of the old agricultural schools are still offering intermediate courses to about one hundred students: Ste-Martine which is already integrated administratively with the Youville regional commission, and Ste-Croix where the question of integration is being studied.

Integration of intermediate agricultural education has brought the activities of the agricultural schools at Ste-Anne-de-la-Pérade, Brigham, Nicolet, La Ferme (Abitibi), Rimouski, and St-Barthélémy to an end.

The intermediate agricultural schools were founded as far back as the 1930s to help train good farmers, competent farm workers, and skilled staff for agricultural and related industries. The course lasted for two winter sessions of

six months each, from the beginning of November to the end of April. The students, mostly young people from farms with a good deal of practical experience, were admitted after their ninth or tenth year of schooling. The curriculum was mainly theoretical but with demonstrations on farms attached to the schools or on neighbouring farms.

Following integration with the regional school commissions' vocational education programmes, the intermediate agricultural courses will still keep to their original purpose, although the curriculum will be somewhat more theoretical than before and also more in keeping with present-day needs of farming, namely economics and management.



An up-to-date milk-house on the farm of André Bélanger at Saint-Lin in l'Assomption County.

grants of \$1,742,600 to improve milk quality

The Minister of Agriculture and Colonization, Mr. Clément Vincent, has revealed that, in the last fiscal year, his department made grants totalling \$1,742,000 to farmers for the construction and equipment of milk houses under the act to improve the quality of milk for manufacturing. During that period, 292 dairy farmers took advantage of the \$400 grant to buy a milk cooler (including bulk tanks) and 3,252 chose the \$500 grant to build a milk house.

Quebec dairy farmers have received financial aid amounting to \$4,838,200 under the act since it came into force, as follows: 1,167 grants of \$400 to buy milk coolers, and 8,738 grants to build milk houses.

Names, addresses, and telephone numbers of the Department of Agriculture and Colonization's staff in the counties of Berthier, Deux-Montagnes, Jacques Cartier, Laval, Joliette, L'Assomption, Montcalm, and Terrebonne.

Regional office: Box 669, L'Assomption, Quebec. Telephone: 837-5055.

Regional coordinator: Eloi Guillemette, Administration: L. Thomas Lanouette.

Specialists: Farm management, André Rémillard; Farm credit, Roger

Gagnon and Jean Lajeunesse; Veterinarian, Marc L'Heureux, D.V.M.; Economics, Arsène Désilets; Extension, Gilbert Moreau; Field corps, Gustave Ouellet.

Horticulture: Strawberries, Paul Vanier; Small fruits, Hughes Leblanc; Canning crops, Maurice Brodeur; Potatoes, Omer Michaud; Tobacco, Conrad Turcot and Jean Allard; Apples, Roland Lorquet.

Livestock: Bruno Gélinas, Poultry: André Melançon. Agricultural engineering: Robert Baillargeon. Domestic science: Rolande Gravel and Cécile F. Noël.

Crop insurance: André Gagnon and Donat Martin (adjuster). Soils: Armand Thériault. Crop protection: Gérard Rioux. Beekeeping and maple production: J.R. Benoit. Special inspector: Réjean Nantel.

Other personnel: two office heads and three stenographers



Celery on muck soil on the farm of Robert and Raymond Vaes at Lavaltrie, Berthier County, in Agricultural Region 10.

MONTREAL REGIONAL AGRICULTURAL LABORATORY: 1578 St-Hubert, Montreal 132, Telephone: 873-4432 (eventually to be moved to L'Assomption).

Director: Dr. Benoit Galarneau, D.V.M.

Veterinary laboratory: Dr. Claude Hébert, D.V.M.; Dr. Grégoire Marsois, D.V.M.; Dr. Igor Platonow, D.V.M.

Chemicals and soils laboratory: head to be appointed. **Crop protection laboratory:** head to be appointed.

BERTHIER

Office: 464 Vaudreuil, Box 120, Berthierville. Telephone: 836-3701.

Representatives: F. De La Durantaye, J. Paul Houle, Renald St-Gelais: Berthier, Lanoraie, La Visitation, St-Antoine-de-Lavaltrie, St-Barthélémy, St-Charles-de-Mandeville, St-Cuthbert, St-Damien, St-Gabriel-de-Brandon, St-Ignace-de-Loyola, St-Joseph-de-Lanoraie, St-Michel-des-Saints, St-Norbert, St-Viateur, St-Zénon.

Other personnel: Fernand Lapointe, inspector. Paul Perras, veterinarian (St-Gabriel).

DEUX-MONTAGNES

Office: 37 rue St-Eustache, St-Eustache. Telephone: 473-2703.

Representatives: Paul Morin, Marcel Mondou: L'Annonciation, Oka, St-Augustin, St-Benoit, St-Canut, St-Colomban, St-Eustache, St-Hermas, St-Joseph-du-Lac, Ste-Scolastique, Indian Reserves.

Other personnel: Marcel Giguère, inspector. Jean Lajeunesse (Farm credit). Jean Paquin, Veterinarian.

JACQUES-CARTIER-LAVAL (Ile de Montréal and Ile Jésus)

Office: 201 Crémazie Boulevard East, Montreal 11. Telephone: 389-8011.

Representative: J.A. Lafortune: St-Jean-de-Dieu, St-Raphael de l'Ile Bizard, Laval, and other localities.

Other personnel: Pierre Laliberté, inspector. Two stenographers.

JOLIETTE

Office: 9 Place Bourget North, Box 9, Joliette. Telephone: 756-6424.

Representatives: J.N.E. Blais, I. Coderre, A. Montambault, Joliette South, Notre-Dame-de-Lourdes, Notre-Dame-des-Prairies, Notre-Dame-du-Sacré-Coeur-de-Jésus, St-Alphone, St-Ambroise, Ste-Béatrix, St-Charles-Borromée, St-Cléophas, St-Côme, Ste-Elisabeth, Ste-Emélie-de-l'Energie, St-Félix-de-Valois, St-Jean-de-Matha, Ste-Marceldine, Ste-Mélanie, St-Paul, St-Thomas.

Other personnel: Candide Lefebvre, inspector; Roland Marsolais (Cooperatives); Roger Benoit (Beekeeping and maple production); Roger Gagnon (Farm credit); Fernand Houle, veterinarian; Médéric Fafard, Dairy inspector; Two stenographers.

L'ASSOMPTION

Office: 771 Route 48, Box 669, L'Assomption. Telephone: 837-5055.

Representatives: Gérard Raynauld, André Paré, J.M. Beausoleil; L'Assomption, L'Epiphanie, St-Charles-de-Lachenaie, St-Gérard Magella, St-Henri-de-Mascouche, St-Joachim, St-Lin, St-Paul l'Ermite, St-Roch de Lachigan, St-Roch West, St-Sulpice.

Other personnel: Marcel Picard, veterinarian; Roméo Doré, Food Hygiene Inspector; Edmond Charpentier (mechanized projects); One stenographer.

MONTCALM

Office: 166 Main Street, Box 234, St-Jacques. Telephone: 839-3401.

Representatives: J. Guy Paquin, Mastai Dupuis, Michel Richard: Chertsey, Lac Paré, Notre-Dame-de-la-Merci, Rawdon, Ste-Agricole, St-Alexis, St-Calixte, St-Donat, St-Esprit, St-Jacques, Ste-Julienne, St-Ligori, Ste-Marie Salomé, Wexford.

Other personnel: Roch Desrochers, inspector; Ivanhoé Pauzé (Horticulture); Jules Simard, veterinarian; André Martineau, veterinarian; Léopold Gaudreau, Food Hygiene Inspector; Guy Melançon, Food Hygiene Inspector; One stenographer.

TERREBONNE

Office: 158 Parent, Box 127, St-Jérôme. Telephone: 438-1281.

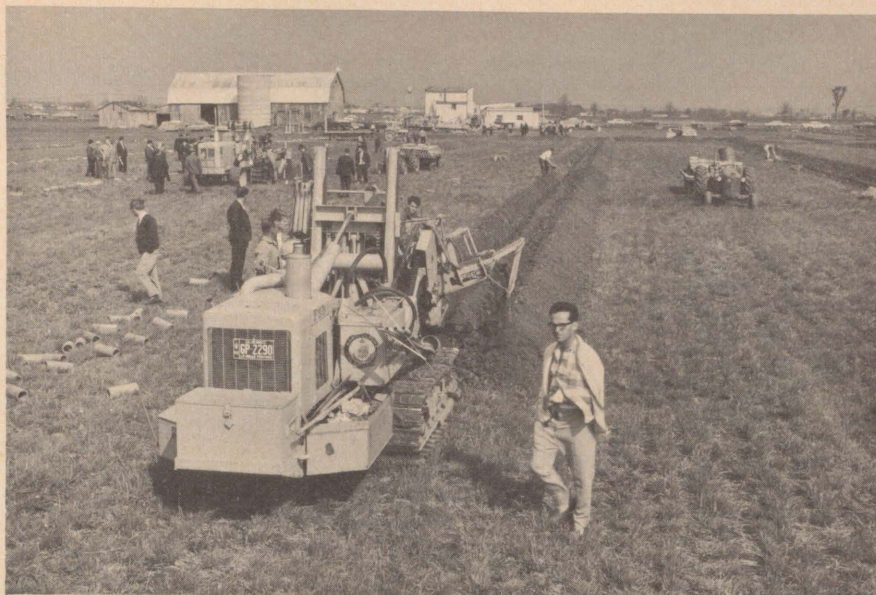
Representatives: Albin Noel, Serge Léonard; Brébeuf, Ivry sur le Lac, Lac Supérieur, Lanthier, Lesage, Mont Tremblant, Piedmont, Ste-Adèle, Ste-Agathe, Ste-Anne-des-Lacs, Ste-Anne-des-Plaines, St-Antoine-des-Laurentides, St-Faustin, St-Hypolite, St-Janvier de Blainville, St-Janvier de La-croix, St-Jérôme, Mont-Rolland, St-Jovite, St-Louis, Ste-Lucie, Ste-Marguerite, St-Sauveur, Ste-Sophie, Ste-Thérèse de Blainville, Ste-Thérèse (West), Val Morin.

Other personnel: Marcel Giguère (St-Eustache) and Georges Leblond, Inspectors; C.A. Gauthier, veterinarian; Vital Boucher, Dairy inspector; 11 Food Hygiene Inspectors (Montreal); One stenographer.

**gross returns of
\$2½ million
expected by
Quebec mink
breeders in 1969**

QUEBEC MINK RANCHERS are expected to produce more than 180,000 pelts this year with a gross value of about two and a half million dollars if current trends continue, according to Mr. Stephen Poliquin of the department of Agriculture and Colonization's fur-bearing animals section. This would be an improvement over previous years.

Mr. Poliquin bases this encouraging forecast on the present excellent con-



A drainage tile laying demonstration on the farm of Bernard Brault at Sainte-Martine in Chateauguay County.

ditions in Quebec's mink-raising centres and on the strong demand for Canadian mink skins on European markets, where they are considered to be decidedly superior. He points out, however, that competition will remain keen because the forthcoming world production is estimated at about 25 million skins, which is equal to present market requirements.

In order to help the approximately 125 mink raisers in Quebec, the department of Agriculture and Colonization supplies them at a nominal cost with the vaccines needed to protect their animals against the three main infectious diseases of mink. The department buys the vaccines and pays the veterinarian's fee.

Quebec mink ranchers specialize chiefly in raising pastel and standard black mink.

Quebec's elite seed potato stocks satisfactorily tested for disease in Florida

DR. BERTRAND FOREST, director of Research and Education in the Department of Agriculture and Colonization, said recently that the tests for disease carried out in 1968-1969 on the department's stocks of Elite potato seed at Homestead in Florida were very satisfactory.

MACDONALD JOURNAL — DECEMBER 1969

nearly 12 million feet of drainage tile laid in Quebec this year under five-year farm drainage plan

Nearly 12 million feet of drainage tile were laid in various parts of Quebec during the past season and it is planned to lay another 15 million feet next year.

Mr. Clément Vincent, Quebec Minister of Agriculture and Colonization, revealed these figures during a brief review of the five-year farmland sub-

drainage plan started in 1968, in a speech to about a hundred farmers at the closing banquet of the fifteenth provincial ploughing contest held recently at Bedford in Missisquoi county.

Starting with 3 million feet in 1965, tile-drain laying has increased to almost fourfold this year. Mr. Vincent said that, at this rate, the target of 50 million feet by 1972 should definitely be reached and perhaps even exceeded.

Mr. Vincent congratulated the winners and participants in the ploughing contest and said that a competition of this kind has beneficial effects throughout the province because the many spectators can put into practise, on their own farms, the methods they have seen demonstrated by experts.

The tests, conducted in collaboration with the State of Maine and the Province of the New Brunswick, are part of an annual programme for testing plants of the various lines and varieties propagated at the department's Manicouagan Elite potato station. Valuable time is saved by growing plants from the Manicouagan stocks (which will be used to produce Elite I and Elite II seed next season) in Florida during the off-season to test them for freedom from disease.

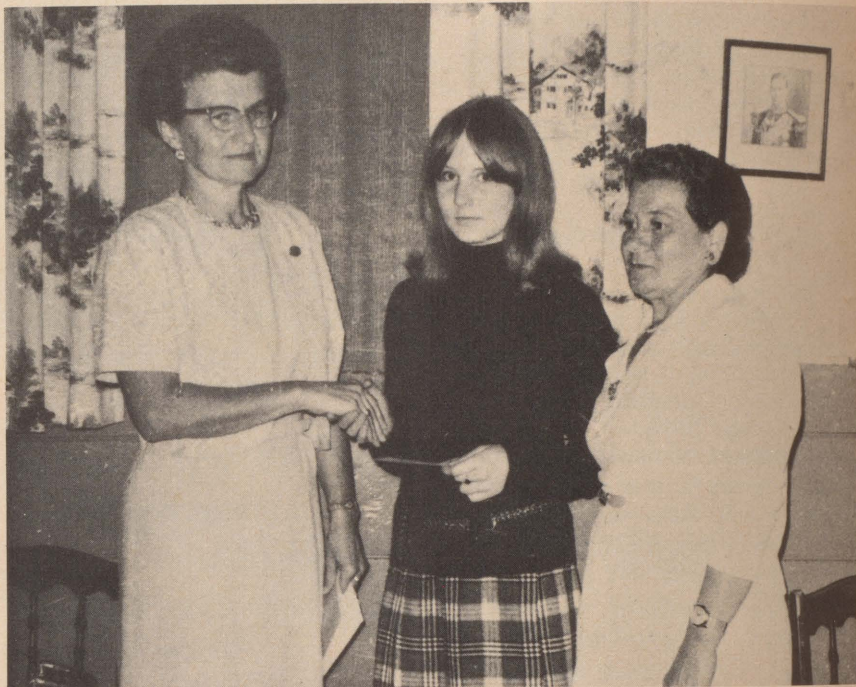
Dr. Forest points out that, as a result of the tests which have been concluded, a number of infected plants were discovered and the corresponding tubers at Baie St-Ludger have been destroyed. As regards the cost of the work done in Florida since 1966 — scarcely \$3,000 last

year — Dr. Forest said that it is amply justified by the results and the need for such a disease testing programme. He pointed out that potato research in Quebec is handicapped by climatic conditions; pending possible introduction of new methods to overcome this difficulty, the Florida programme is the only way to avoid delaying the work.

More than an acre of land at Homestead has been used for these trials in 1969. Half of it was taken up by several thousand plants of eleven strains and varieties representing over 80 per cent of Quebec's production of select potatoes. The other half was used to test plants of stocks which will be multiplied by a number of Quebec growers this year.

Women's Institutes

NEWS AND
VIEWS OF THE
QUEBEC WOMEN'S
INSTITUTES
INC.



Diane Prangley, winner of the Estella Holmes Scholarship offered annually to a student enrolling in a teacher training course by the Stanstead County W.I. in honour of its founder and first president, receives a cheque for \$100 from Mrs. Warren Soutiere, Convenor of Education for the Stanstead North branch. Mrs. T.T. Keane, County

Convenor of Education, looks on as the presentation is made. Miss Prangley, along with her mother and grandmother were guests at the September meeting of the Stanstead North branch where the presentation was made. Miss Prangley is now a student at Macdonald College.

president's xmas message

Dear Fellow Members:

May your Xmas be a time of blessing and if in the New Year you find both in your own life and in the work of the W.I. that there are more problems than easy answers, don't despair, for more people have been blessed through adversity than have been perfected through prosperity.

May we heed the old admonition of St. Paul, contained in the 12th chapter of Romans, the twenty-first verse: "Be not overcome by evil, but overcome evil by good."

Happy New Year to all.

*Your President,
Ethel M. McGibbon.*

different approaches but similar goals

Mrs. O. Bulow, President of the Dewittville branch of the W.I., recently entertained Mrs. R. Raban Williams from Haydon Bridge, Hexham, Northumberland, England. Mrs. Williams and her husband made their trip to Canada on a W.I. charter flight. As a W.I. member, Mrs. Raban Williams was interested in meeting as many Canadian W.I. members as possible in order to obtain information on programming and activities at our meetings. Mrs. Williams visited friends in Nova Scotia first, then came to Quebec. She arrived in Dewittville earlier than planned. Consequently, just five Dewittville and two Huntingdon members had a chance

to meet the Williams. This was unfortunate because it certainly was an enlightening evening.

In England the W.I. do not meet in members' homes but rather in a hall. This is due to the fact that their average attendance could be from 30 to 60 members. The English groups enjoy staging plays, choir competitions and county fair competitions. They generally have a speaker or demonstrations at their meetings. Mrs. Williams was interested in our Convenors and their reports at meetings, as this is something that is not done in England. She also expressed interest in our roll calls and was surprised to see that we have the Mary Stewart Collect which was also printed in the Northumberland programmes. Our Dewittville W.I. scrap book happened to have a write-up about the origination of the Collect, so Mrs. E. Martin kindly wrote up a copy of it for Mrs. Williams.

English W.I. members have their own college — Denman College, Marcham, Abingdon, Berkshire — where they may apply to take many interesting courses in home making, the arts, archaeology, planning in Town and Country, public speaking and many others. Their husbands are also welcome to take the courses at the same time.

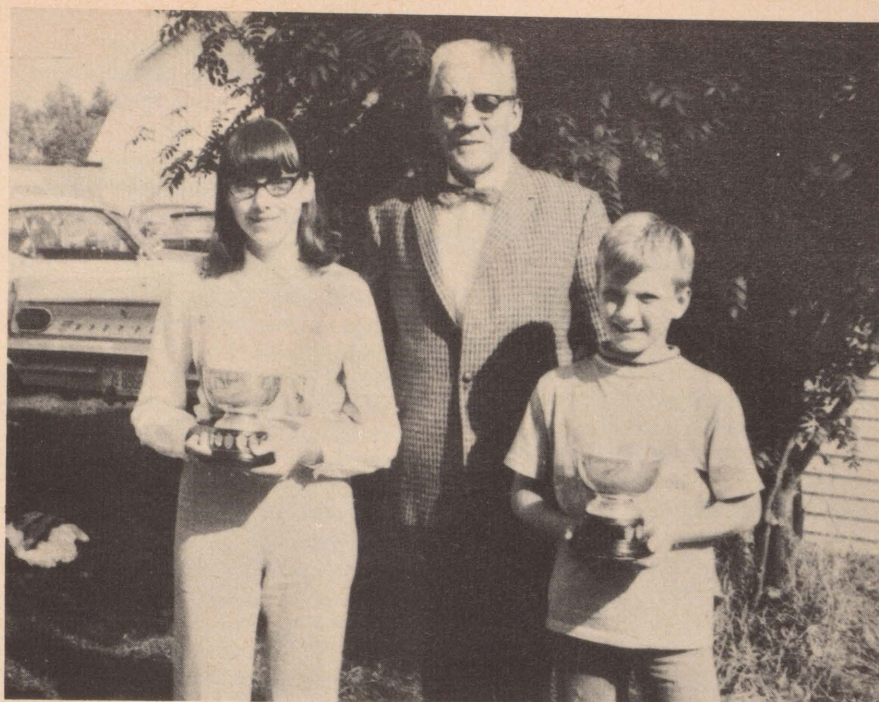
Over coffee and refreshments we continued to exchange our ideas and aspirations in W.I. work.

this month with the q.w.i.

ABITIBI EAST COUNTY: Val d'or branch — twelve members met at Mrs. Roland David's home and visited her flower nursery. Roll call was name a vegetable and manner cooked. Decided to hold a penny sale to raise funds. Coffee served.

ARGENTEUIL COUNTY: Brownsburg had a demonstration on the making of fancy sandwiches. Frontier members enjoyed a bus trip to Montreal. Jerusalem-Bethany branch heard Mr. Norman Leggett, of the Laurentian Regional High School, speak on the Adult Education courses offered. Lachute members decided to furnish a wing of the new Lachute Residence with money left to the branch from the Mary Millar estate. Lakefield also heard Mr. Norman Leggett speak on Adult Education courses. Pioneer branch had a demonstration on covering wire coat hangers and a darning contest. Upper Lachute — East End had news items and a contest on well known magazines.

BONAVENTURE COUNTY: Black Cape had 19 members answer roll call



Linda Vance of Ayer's Cliff and Danny Gosselin of Coaticook, winners of the trophies offered to the boy and girl earning the most points for exhibits at the 53rd annual school fair sponsored by the Stanstead County W.I. The fair was held at Ayer's Cliff on September 13. Shown with Linda and Danny is Mr. W.G. MacDougal, who as agronomist at Sherbrooke, enlisted the cooperation of the W.I. in founding the fair in 1916. Now retired, he still takes a

great interest in the fair and gives it active — and invaluable — assistance. Exhibits, for which points are awarded, include vegetables and flowers raised by the exhibitor from seeds furnished by the W.I. or from the home garden, sewing, cooking, art work, essays, and various other hobbies. Trophies are engraved with the winner's name and are placed on exhibition at the winner's school throughout the following year.

with payment of one cent for each year of married life. This being the branch's twentieth anniversary, a birthday cake was made by Mrs. Norman McNair and pictures were taken. Eight charter members were present, including the first Treasurer, Mrs. William Dimoch, and first Secretary, Mrs. Norman McNair. Arrangements made for catering the Rotary Club banquet. Reports made regularly to the Campbellton Graphic. **Grand Cascadepia** branch had eight members and seven guests at their meeting. Guests included Mrs. Horace Ford and her daughter from Sussex, England. Mrs. Ford gave a very interesting talk on W.I. work in England. A gift was presented to Mrs. Ford from the branch. A white elephant sale was held and the mortgage on Centennial Hall was paid off. **Marcel** members donated trophy cups to New Carlisle High School, Shigawake Port Daniel School and St. Godfoi Convent. They also presented prizes to these schools and to the English class at the Convent. **New Richmond West:** All meetings reported to County Convenor. Reports made to Campbellton Graphic. Posters made. **Port Daniel** members toured the Bathurst paper

mill in New Richmond. A quiz was held by the President on "Know Canada Better." Handicraft and home baking sale was held, and a parcel of clothing was sent to a needy family. **Restigouche** heard reports from all convenors. Ditty bags were filled. Two new members joined. The Convenor of Education held a spelling match.

BROME COUNTY: Abercorn branch held a school fair. Repairs and painting completed on hall. Two new members joined. **Austin** entertained Milby Branch and County President and Provincial Second Vice President. Silent auction netted \$16.86 for Welfare and Health committee. Ruffled knitted bag for county funds with \$7 realized. Members enjoyed a bus trip to Quebec City. From January to June, the library gave out 11,600 books. New shelves and a paint job are being done at the library. **South Bolton** planned an auction to help county funds. Attended County Convention. **Sutton** branch had a talk and slides were shown of a trip to Ireland and Wales. Heard report on "Home for elderly women in Sutton." Original skit was presented by two members, and they had Dunham and Abercorn

W.I.'s as guests. Demonstration given on winter bouquets.

CHATEAUGUAY-HUNTINGDON COUNTIES: **Aubrey-Riverfield** members enjoyed a drive and a picnic to Fortin Bakery in Hemmingford, and The Little Denmark Flower Shop. A talk given by a member who had recently visited Scotland was also enjoyed. Plans were made to serve lunch at the 4H Club Field Day. A quiz on jumbled letters was answered. A donation of \$10 was sent to the North West Territories Indian women to help finance their sewing course and \$10 was given to Howick Elementary School Library. A Sunshine Box was sent to a member who had been hospitalized. **Dewittville:** Mrs. A. MacIntosh spoke on drugs and drug addiction, and Mrs. R. Greenbank spoke on diabetes, the variety of forms of the disease and the diet. She also handed out pamphlets on the disease. Names were drawn for \$50 gift scholarships and these went to Alec McCaig and Donna MacIntosh. Gifts of \$15 to be used for school libraries were sent to each of the following schools: Ormstown Elementary, Huntingdon Academy and St. Joseph's. Two hundred dollars was sent to N.C.W.I. A nearly-new sale of children's clothing is planned.

Dundee: Early history of Dundee from 1606 to 1820 was given with maps showing boundaries and roads. This has been followed by Mrs. Hugh Ferguson who gave an account of the settling, occupations, roads, and railroads of the early days of Dundee. At each meeting, a portion of the history of Dundee will be given followed by discussion. Thus a more complete history can be written as all members can participate. Tomatoes and cucumbers suitable for freezing were shown. Making of door mats from plastic bread wrappers was demonstrated. A donation of \$5 was given to Huntingdon County Fair for prizes. Clothing to be packed for the Unitarian Service of Canada.

Franklin Centre sent off ditty bags for overseas. There was a discussion of the ancestors of the members of the branch, where they originated from, the family homes, the dates on which they arrived in Franklin Centre. The older members were particularly helpful in this discussion. Leaflets were shown on quilt-making in different counties and a copy of the Centennial Gleaner was passed among those present.

Hemmingford heard a speaker on apples and apple varieties and their nutritional value. Saw a display of many varieties of apples and apple products which can be made in the home (butter, jelly, vinegar, desserts, cakes, etc.)

Howick members enjoyed an interesting talk by Mrs. Elli Wright on her trip to her homeland of Finland this past summer. Home-made buns were judged by Harold Robertson.

Huntingdon branch held an evening meeting with 20 members present. Two bursaries of \$200 each were presented to two students registered in Home Economics at Macdonald College, and also a loan of \$100 to aid another student. Convenors gave informative talks on: Agriculture — plant and garden care for winter, Citizenship — the new laws to facilitate the integration of immigrants, Home Economics — know your modern fabrics and their care, Publicity — the importance of publicity in our work. At the close of the meeting, visitors joined to enjoy a comprehensive showing of slides on our Canadian West. Fourteen ditty bags were filled. **Ormstown:** Mr. Roland Greenbank, Principal of Huntingdon Academy, spoke on education trends in the modern elementary school. First day at school, how, where and when was the roll call. Report on a successful bake sale and tea was heard. The proceeds will be used for life memberships.

COMPTON COUNTY: **Brookbury** held a bridal shower. Catered to a 50th Wedding anniversary and donated to the Salvation Army. Nine ditty bags were filled. **Bury** members had Mr. Serges Paquette, District Manager of Caisse Populaire, speak to them. Furthered their plans for their 50th anniversary. **Canterbury** members answered the roll call with current events of the past week in their community. They held a drawing, helped a needy family, donated to Maplemount and Save the Children. Two members visited St. Paul's Rest Home. Helped with the W.I. project at Cookshire Fair and planned a group trip.

Cookshire saw pictures on Spain and Morocco by a member who had visited these countries. Made plans for a trip. **East Angus** members answered the roll call by naming a vegetable beginning with their initial. Won first prize for the play presented at the Convention at Macdonald College. Three members worked at W.I. booth at the Cookshire Fall Fair. Plans were made for UNICEF. Filled 18 ditty bags and gave clothing to Save the Children Fund.

East Clifton branch held a discussion on modern changes in educational system at new regional school — "Hippies and the Problems of Drug Addiction and Nudism." Donated a prize to Cookshire Fair and worked at the W.I. booth which had "Sir Alexander Galt Regional School" as its project this year. New cupboards were built and new dishes were bought.

Gave a radio broadcast at C.K.T.S. Sherbrooke on "Aware Buyer, Aware."

Scotstown held a dinner before their meeting. Heard report of annual meeting, filled nine ditty bags and gave clothing to Save the Children Fund, which when packed amounted to 50 pounds. Donated money toward the variety show and gave money to the school for gifts for the teachers.

GATINEAU COUNTY: **Aylmer East** branch — Mrs. Taylor, National Secretary, gave a talk on different levels of W.I. work. Quilt blocks were displayed. Canada Book 1968 was discussed by Citizenship Convenor. Held quiz, "Know your Canada." **Eardley** members held a draw on a quilt and also on a clown doll. Guest speaker was Mrs. Garry Graham, who spoke on the Home Economics course given at Shawville High School. Contest on W.I. history conducted. Miss Lorette Arvise showed a coloured film on "Reflections of a Nation."

Kazabazua: Reading given, "Old methods are still the best, says Richmond Bakery, also Charlie Murray, Merchant, of Barry's Bay, Ontario." Contest held on important news items on television, radio, and newspapers. A discussion was held on likes and dislikes of T.V. programmes shown on Ottawa T.V. stations. **Wright** members' roll call was name a Cabinet Minister in the federal government and his portfolio. Six ditty bags sent to Save the Children Fund. Miss Pearl McConnery gave a report as delegate to the Q.W.I. convention at Macdonald College.

MEGANTIC COUNTY: **Inverness** members answered the roll call with a collection for the hungry. Some members handed in quilt patches to be sent to the Bear River Institute in Nova Scotia. Plans were made for a card party and a Hallowe'en party for the children after the UNICEF collection is finished. **Kinnear's Mills** members answered the roll call with a Thanksgiving verse. The Heritage of Canadian Handicrafts was given to a member to take home; each member is to retain it for a month. UNICEF literature was read.

MISSISQUOI COUNTY: **Cowansville** held a successful food sale. Answered the roll call by naming an article manufactured in Missisquoi County. Members participated in several talks, followed by discussions, on the following subjects: October work in the garden; What is food?; Decrease in polio; The town library; Pensioners concerned; The semi-annual County convention. **Dunham** members were invited to Sutton for their September meeting and all reported a most enjoyable meeting highlighted by slides on

Ireland. The Citizenship convenor, Mrs. Bidner, formerly from Germany, described her experience in becoming a new Canadian and said that the kindness of neighbours and employers made her family glad to adopt Canada as their home. The Convenor of Welfare and Health spoke on "How safe are low calorie sweeteners?", the Publicity Convenor told about the Cowansville library and the opening of the Community School. Miss Phelps showed slides of the old stones houses of Dunham.

Fordyce: For the roll call, members answered the question "What do you most admire in an elderly lady?" A letter was read from Premier Bertrand regarding the Travelling Library. A pleasant afternoon was spent playing cards. **Stanbridge East:** The roll call was answered by naming an important quality of a good W.I. member. Program was opened by singing the Institute Rally Song. A study is being made of the F.W.I.C. from a recently received brochure. A new member was enrolled. A quiz on the F.W.I.C. was conducted by the Publicity Convenor. Talent money was raised in various ways: selling potted bulbs and plants, jars of jelly, garden vegetables, home-made articles, food, etc., and by doing taxi work.

MONTCALM COUNTY: Rawdon: Mrs. Copping, President, visited Renhold W.I. on her trip to England. She was also guest of honour at a social evening given by Lawnfoist W.I. in South Wales, and was deeply touched by the warm reception she received — a choir of Welsh voices welcoming her with the singing of their national anthem. A group of W.I. members from the area had been on a tour of Norway and part of the evening's programme was the showing of a film taken there. Pennies for Friendship box produced \$8, and the usual donation was made to the Northern Extension Fund.

PAPINEAU COUNTY: Lochaber branch planned to attend a silver wedding anniversary for a former member who has moved away. Roll call was name your favourite fall flower.

PONTIAC COUNTY: Bristol branch heard a very interesting talk given by County President, Miss Hilda Graham. Exhibited articles at Shawville Fair. Slides were shown by Mrs. Art

Hodgins of her recent trip to Honolulu. **Clarendon** members heard a poem read by the President, "Fair at the County Seat." A dollar per member was collected for the Shawville Fair tea room. Donation of food for Shawville Hospital. The 10 articles made by members for Quyon Fair exhibit took first prizes. **Quyon** branch heard Convenors' items. Catered for an auction sale. Prizes were given at a very successful school fair.

Stark's Corners: Mrs. John Fulford, Convenor of Education, gave a very interesting talk and reading on the education of children during their early years in school and the help of parents towards some. Each member gave \$1 towards the hospital tea room fund. Display of 10 articles were shown at Quyon and Shawville Fairs where second prize was awarded for same in each case.

Wyman branch heard the Citizenship Convenor read an article, "Frank Horn, brother of Kahn Tineta Horn" on the Indian problem. Heard report of annual convention. Wyman won second prize of \$35 for one-act play at this convention. Members made 126 dishtowels for Community Hospital. Convenors' items were, "One out of 12 Canadians is illiterate," "Standard sizes for children's clothing," "Blame soft drinking water for heart attacks," "How to lose friends and money too."

QUEBEC COUNTY: Valcartier Village: Mrs. Eileen Rourke gave a short talk on Home Economics and also held a quiz. Members sent \$2.30 to Northern Extension Fund. Three new members enrolled. To celebrate the 50th anniversary of the F.W.I.C., the

members held a dinner at a local hotel. A toast was proposed to the F.W.I.C., and Mrs. W. Jock gave a talk on the history of the W.I. Plans were completed for a euchre party. Held a

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RICHMOND COUNTY: **Cleveland** branch discussed plans for anniversary tea to celebrate the founding of the branch 50 years ago. Prizes given in Grade VI at St. Francois School won by Elizabeth Stevens, Diane Masters and Richard Bedard. Ripe tomato contest held, and winners were Mrs. Gladys Perkins and Mrs. Charles Johnston. The tomatoes auctioned for Pennies for Friendship Fund. **Denison Mills** discussed an inter-branch competition. Mrs. Farant, County President, spoke briefly on provincial and county meeting. Sale of antiques and other articles realized \$65. Twenty-five Christmas ditty bags sent to Save the Children Fund. Members voted \$6 for A.D.S. School and \$6 for St. Francois for prizes. Prizes awarded for flower boxes: First, Mrs. Duncan Rief, second, Mrs. Wm. Brock, third, Mrs. Cecil Hannan and Mrs. A. Boreham tied. A gift was given to Mrs. Paige for judging the flower boxes.

Gore heard Galen Driver in a discussion of work and conditions of W.I. They also heard a taped recording on the same topic by Mark Waldron. Sunshine basket sent to a member who is convalescing. Donated \$5 to UNICEF. **Richmond Young:** Roll call answered with photo of school attended. Barry Rusk, son of Mr. and Mrs. Ronald Rusk, Drummondville, won \$100 bursary offered by this branch to the student successfully completing Grade 11 and continuing his education for more than one year. Barry is attending Carleton University, Ottawa.

Shipton held a successful Kentucky Fried Chicken supper. Plans made for school fair. The programme was to recite the first six lines of Mary Stewart Collect correctly or pay 25 cents. All paid — a profitable project! Mrs. J. Saffins won the word-making contest; Mrs. F. Bournes, the consolation. **Spooner Pond's** roll call was to tell a joke or pay a 10-cent fine. Children's fair held at the home of Mrs. L. Davidson. Mr. Davidson judged the vegetables and flowers. Had as guests

members from Cleveland and Shipton branches. As is customary, the first child born to each of a member's children is presented with a silver dollar of its birth year. This year's silver dollar was given to Mrs. Fortier to present to her son Raymond's baby boy.

STANSTEAD COUNTY: **Ayer's Cliff** entertained the teaching staff of the local school with a programme of a talk and slides of the historical spots in the western U.S.A. and northern Mexico. Roll call was poems, verses, and prayers for Thanksgiving. The branch donated to the school kindergarten, renewed a subscription to the Canadian Geographic for the school library, and ordered UNICEF cards. They also sent a cash donation to UNICEF.

Beebe received reports on inspection of school fair gardens and assistance of members at school and county fairs. Agreed to cater for a member at an anniversary. **Hatley:** Roll call was "Name a variety of apple." Heard reports of convention at Macdonald College and county quarterly. Promoted an art class for children. Donated to Hatley library. Hatley tied for first place with the Cercle des Fermières de Stanstead in the group exhibit at the County Fair. Sponsored a summer holiday at camp for two children. Four members attended a W.I. meeting at Bromptonville.

Stanstead North had Miss Norma Holmes give a talk on work in Northern Quebec by the Q.W.I. The education convenor gave a report on Churchill Falls, its construction and plans for the future. The branch heard a report on a successful annual dinner.

SHEFFORD COUNTY: **Waterloo-Warden** members' roll call was name and explain any branch of W.I. work. Report of semi-annual meeting. Contests: "Pack a bag" and "Hands." White Elephant Sale. Care package raffled. **Granby Hill:** Each member brought a bottle of pickles or jam for roll call. Report of semi-annual meeting. A reading entitled "A day in the life of a farmer's wife" was given. **Granby West** members are making plans to celebrate fifteenth anniversary of the branch.

SHERBROOKE COUNTY: **Belvidere** branch presented a skit "The Prize Quilt" in drama contest at Macdonald College. Mrs. Charles Drummond took second prize on bed throw in the J.P. Coats contest at provincial level. Members were asked to serve at a twenty-fifth wedding anniversary. Members helped at annual school fair and fair booth in conjunction with Sherbrooke Fair. **Brompton Road** members helped with the county float at the annual tombola. The float depicted the meeting of the Abenakis

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Indians with the Roger's Rangers at Little Forks (Lennoxville). Work calendar was a jar of jam or jelly for Grace Christian Home. Members helped at Handicraft Booth at Sherbrooke Fair and at the school fair.

Lennoxville: Mrs. W.S. Richardson showed slides of trip across Canada and the Alaska Highway. Members donated \$15 towards prizes for graduates of Lennoxville High School to be presented at Commencement Exercises. **Milby:** Mr. Clarence Kendall spoke on the new regional school. Members helped with a float for the Optimist Parade.

VAUDREUIL COUNTY: Harwood's Health and Welfare Convenor gave a most informative talk on the history of medicine over the past 100 years. This was followed by a scrambled word quiz on names of diseases, which proved to be a hard task for most members. Mrs. Prinn and Mrs. Edwards raised \$13.50 by making place sets. This money is to be used to purchase cigarettes for the men on our next visit to the Veterans Hospital at Ste. Anne de Bellevue.

macdonald reports
(Continued)

agement which was held in Winnipeg in early November, was basically a fact-finding conference to examine the nature and magnitude of change required to secure the sound and constructive evolution of the Canadian pig industry (with particular reference to breeding). The following is a summary of their findings.

There is optimism that the immediate future will bring increased market opportunities for pork products. Domestic demands will increase as a direct consequence of increasing population. And given a quality product there would appear to be reasonable prospects for expanding per capita consumption in Canada and, perhaps, for developing export markets.

Where it's only a question of continuing production as in the past, the needs for breeding stock could continue to be met by a seed stock industry such as we have today. However, it is clearly evident that the question is not one of continuing production as in the past. Substantial changes are being made in commercial production practices — structural changes that challenge the seed stock industry as it has never before been challenged. There is growing concern for maximizing the margin of profitability with emphasis on the total production picture from reproductive performance through to the marketing of

a quality product. It is clear that the main criteria by which seed stock producers will be judged are health of their stock, adequacy of their breeding program with specific reference to an ongoing selection-breeding system, and the degree of service they are prepared to offer their customers.

The seed stock industry is cognizant of these facts. There is awareness that stocks suiting these requirements will be sought out by the producers without regard for their country of origin. Hence there is concern that, should the Canadian seed stock producers fail to meet the challenge, the responsibility for producing breeding stock may eventually come to rest with breeders and breeding companies outside Canada.

The conference reviewed the current status of our seed stock industry. There is substantial agreement that our national herd comprises breeds and breeding animals from which a strong competitive industry can be developed. There is also agreement that producers have available to them the technical information relevant to construction of dynamic, progressive selective breeding programmes. Further, there exists the knowledge and skills required for feeding, managing and merchandising the product.

There are also unpalatable facts; facts that relate specifically to the structure of our national seed stock herd. For a variety of reasons, not the least of which are geographic distances and finances, the national herd is fragmented in a way that inhibits development of fully effective selective breeding programmes. Herds in general are

small and offer exceedingly limited scope for successful application of proven principles of animal breeding. The great diversity of goals, itself an inevitable by-product of the large number of breeders and isolation by distance, inhibits the evolution of a co-

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hesive approach to pig improvement even within breeds.

Another unpalatable fact is that pig testing procedures are too frequently used for advertising rather than selection purposes. This criticism applies in equal measure to both the pedigree breeder and to those engaged in the production of hybrid gilts for breeding use. Tied to this is the fact that commercial producers in general have not become adequately performance-con-

scious and consequently do not demand the performance credentials that are of importance (specifically within herd comparisons and breeding programmes), or conversely are vulnerable to exploitation by those who would subvert performance credentials to promotional ends.

It is evident that all these issues are of grave concern to the participants in the conference. It is also evident that the industry is desirous of developing a

soundly structured Canadian seed stock supply. The problem is how to translate this concern and intent into action.

Basically, this involves three principle elements:

1. Adoption of a sound performance selection philosophy;
2. Consolidating the national seed stock herd into units of size sufficient to subtend decisive application of animal breeding principles;
3. Adoption of management procedures that will secure the health status of the stock produced.

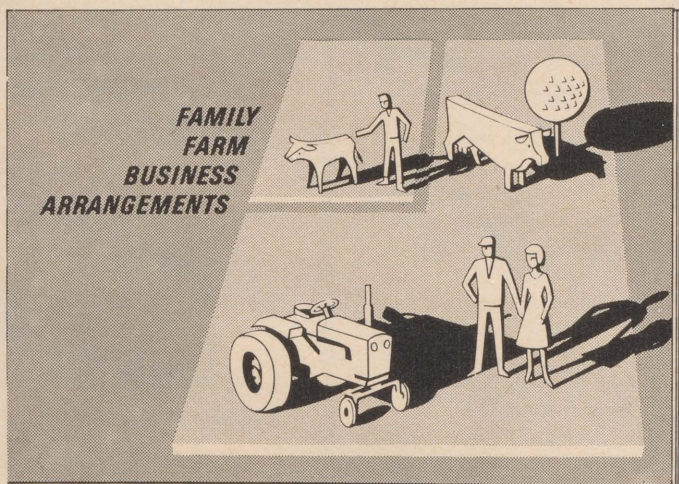
Of these items, the one that causes greatest concern to those presently engaged in producing breeding stock is that of herd size. And while it is expected that problems of management and health control are accentuated and made much more critical, it is recognized that these are problems which are surmountable and must be overcome in order to achieve an effective status of breeding herd operation in keeping with current and future demands for quality breeding stock.

At this point we should emphasize that individual small breeders can and will continue to play a role for some time to come. Herd size will seriously limit the effectiveness of their breeding and selection efforts and, as a consequence, they will face increasingly strong competition from larger breeding units. Nevertheless, the decision of whether to continue as at present or, alternatively, to move toward a substantial increase, will be decided by the economics of the situation.

For those who wish to expand the scope of their operation without a massive increase in facilities and investment, there is the alternative outlined for the conference by Ken Woolley. This is a cooperative approach in which the individual participants must identify themselves completely with the company-type operation. This means abandoning independence of decision in favour of strict adherence to the breeding and selection principles of the organization in order to do a totally more effective job.

Where the industry must go in its pig breeding programme, and how it might get there have been outlined in considerable detail by the invited contributors and by participants from the floor. The real issue is not what must be done but rather how soon.

The conference seems agreed that there is urgency. Experience of the poultry industry — and of the swine industries of some other countries — demonstrate that we must move with speed if Canadians are to retain a majority control over the stock that will produce our market hogs.



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The Lady Aberdeen Scholarship was established when the ACWW met for its Ninth Triennial Conference in Edinburgh, 1959. It was designed as practical support to the FAO's new-launched Freedom From Hunger Campaign and was fittingly named after Lady Aberdeen, Hon. President of ACWW for the first ten years of its life. The LAS Fund has been built up by voluntary contributions from ACWW Constituent Societies around the World. By the date of the 11th Triennial Conference Dublin, 1965, the Permanent Fund was closed with double the minimum target reached. The interest on this fund, with any current donations, provide the Expendable Fund for the Scholarships.

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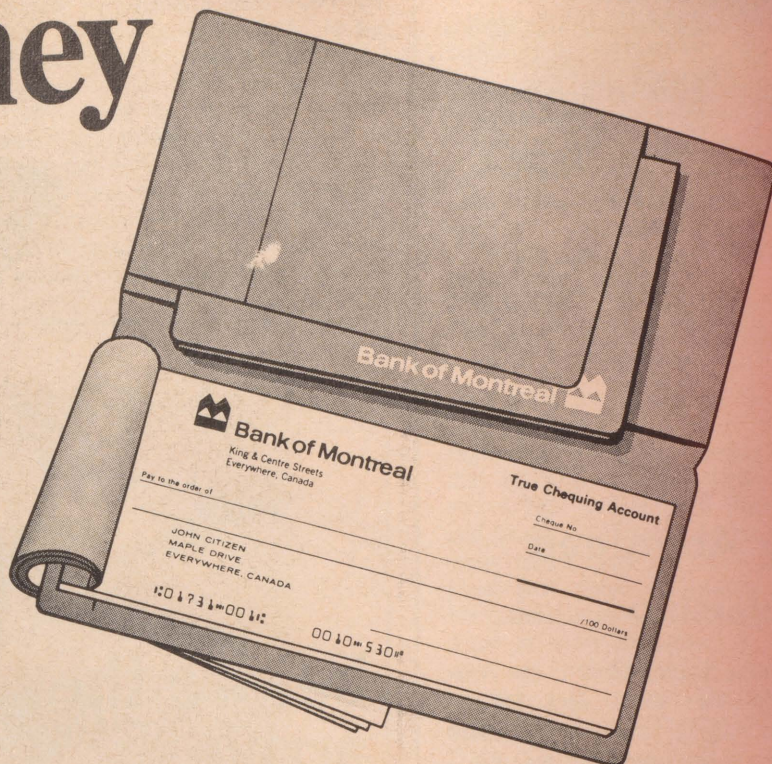
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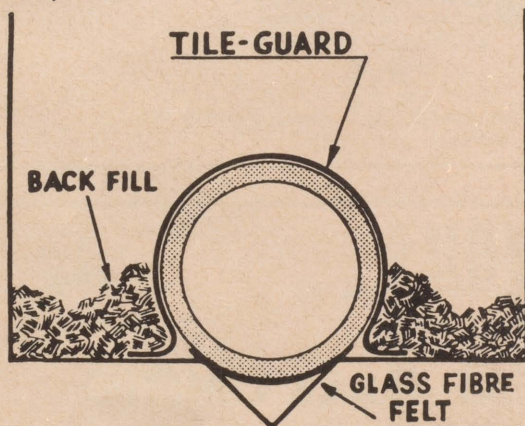
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